

REMARKS

Prior to entry of this reply, claims 1-18, 21 and 22 are pending in the subject application. Claims 6, 7, 8, 14, 15, 17 and 18 are withdrawn from consideration.

A. Introduction

In the outstanding Office action, the Examiner rejected claims 1, 2, 3, 9, 10, 16 and 21 under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings of JP 5-315293 (“the JP ‘293 reference”), U.S. Patent No. 6,626,236 to Bandoh et al. (“the Bandoh et al. reference”), U.S. Patent No. 3,543,839 to Shlosinger (“the Shlosinger reference”) and optionally JP 8-29080 (“the JP ‘080 reference”); rejected claims 4, 5 and 22 as being unpatentable over the combined teachings of the JP ‘293 reference, the Bandoh et al. reference, the Shlosinger reference and optionally the JP ‘080 reference in further view of JP 2-126049 (“the JP ‘049 reference”); rejected claims 1, 2, 3, 4, 5, 9, 10, 16, 21 and 22 under 35 U.S.C. §103(a) as being unpatentable over the combined teachings of the JP ‘293 reference, the Bandoh et al. reference, JP 5-99580 (“the JP ‘580 reference”) and optionally the JP ‘080 reference; and identified claims 11-13 as being allowable.

B. Asserted Obviousness Rejection of Claims 1, 2, 3, 9, 10, 16 and 21

In the outstanding Office action, the Examiner rejected claims 1, 2, 3, 9, 10, 16 and 21 under 35 U.S.C. § 103(a) as being unpatentable over the JP ‘293 reference, the Bandoh et al. reference, the Shlosinger reference and optionally the JP ‘080 reference. The rejection is respectfully traversed for at least the following reasons.

On page 2 of the Office action, the Examiner acknowledges that the JP ‘293 reference (referred to as “Komino” in the Office action) fails to teach heaters at a bottom surface of the heat pipe. However, page 3 of the Office action then states that the newly applied Bandoh et al.

reference overcomes this deficiency of the JP '293 reference. In particular, on page 3 of the Office action, the Examiner states:

To have added a second set of heaters to bottom outer lower surface of heat pipe 40A of Komino (in the manner taught by Bandoh) would have been obvious to one of ordinary skill in the art as taught by Bandoh to advantageously form a "vertically symmetrical heating balance" in the heat pipe 40A of Kimono.

Applicants respectfully disagree. Applicants note that the JP '293 reference is directed to an efficient cooling apparatus and thus, the working fluid 42 is provided to assist in cooling an object in contact with the heat pipe 40 (Abstract of the JP '293 reference). As a result, because the working fluid 42 is provided to aid in cooling the object, as shown in FIG. 4 of the JP '293 reference, in the JP '293 reference the heater is provided completely above the heat pipe 40 and below the object. There would be absolutely no purpose in providing a heater at the bottom surface of the pipe 40 with the working fluid 42 for cooling the object. Thus, the JP '293 reference in fact teaches away from a pipe having a heater at a bottom surface thereof and there is no motivation to combine the JP '293 reference and the Bandoh et al. reference, as suggested by the Examiner. Applicants submit that the Shlosinger reference and/or optionally the JP '080 reference also fail to overcome the deficiencies of the JP '293 reference.

For at least these reasons, applicants submit that the combination of the JP '293 reference, the Bandoh et al. reference, the Shlosinger reference and the JP '080 reference fails to disclose or suggest the combination of features recited in independent claim 1, as well as all the features recited in claims 2, 3, 9, 10, 16 and 21, which directly or indirectly depend from claim 1. It is respectfully requested that the rejection be withdrawn.

C. Asserted Obviousness Rejection of Claims 4, 5, and 22

In the outstanding Office action, the Examiner rejected claims 4, 5 and 22 under 35 U.S.C. § 103(a) as being unpatentable over the JP '293 reference, the Bandoh et al. reference, the Shlosinger reference and optionally the JP '080 reference in further view of the JP '049 reference. The rejection is respectfully traversed for at least the following reasons.

As discussed above, the JP '293 reference, the Bandoh et al. reference, the Shlosinger reference and the JP '080 reference fail to disclose or suggest all the features recited in independent claim 1, from which claims 4, 5 and 22 depend. Applicants' submit that the JP '049 reference also fails to overcome the deficiencies of the JP '293 reference, the Bandoh et al. reference, the Shlosinger reference and the JP '080 reference as applied to independent claim 1.

For at least these reasons, applicants submit that the combination of the JP '293 reference, the Bandoh et al. reference, the Shlosinger reference, the JP '080 reference and the JP '049 reference fails to disclose or suggest all the features of claims 4, 5 and 22, which directly or indirectly depend from claim 1. It is respectfully requested that the rejection be withdrawn.

D. Asserted Obviousness Rejection of Claims 1, 2, 3, 4, 5, 9, 10, 16, 21 and 22

In the outstanding Office action, the Examiner rejected claims 1, 2, 3, 4, 5, 9, 10, 16, 21 and 22 under 35 U.S.C. §103(a) as being unpatentable over the combined teachings of the JP '293 reference, the Bandoh et al. reference, the JP '580 reference and optionally the JP '080 reference. The rejection is respectfully traversed for at least the following reasons.

As discussed above, applicants submit that the JP '293 reference, the Bandoh et al. reference and the JP '080 reference, alone or in combination fail to disclose or suggest the combination of features recited in independent claim 1. Applicants submit that the JP '580 reference fails to overcome the deficiencies of the combination of the JP '293, the Bandoh et al.

reference, and the JP '080 reference, as applied to claim 1. For example, the JP '580 reference fails to disclose or suggest a heater and, as stated in the English abstract, is directed to a looped heat pipe with good cooling characteristics.

For at least these reasons, applicants submit that the combination of the JP '293 reference, the Bandoh et al. reference, the JP '080 reference and the JP '580 reference fails to disclose or suggest all the features of independent claim 1, as well as all the features of claims 2, 3, 4, 5, 9, 10, 16, 21 and 22, which directly or indirectly depend from claim 1. It is respectfully requested that the rejection be withdrawn.

E. Allowable Subject Matter

Applicants appreciate the allowance of claims 11-13. For at least the reasons discussed herein, applicants submit that all pending claims are allowable.

F. Rejoinder of Non-Elected Withdrawn Claims 6-8, 14, 15, 17 and 18

Upon allowance of independent claim 1, applicants request rejoinder and allowance of non-elected withdrawn claims 6-8, 14, 15, 17 and 18, which directly or indirectly depend from claim 1.

G. Conclusion

The remaining documents cited by the Examiner were not relied upon to reject the claims. Therefore, no comments concerning these documents are considered necessary at this time.

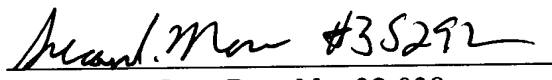
If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

Date: April 12, 2007


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Attachment:

Petition for Extension of Time

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PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.